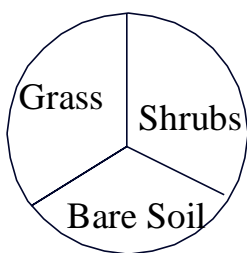




# THE COVEY HEADQUARTERS

Volume 17    Issue 3    Fall 2018

This newsletter is aimed at cooperators and sports-people in Missouri to provide information on restoring quail. This is a joint effort of the Missouri Department of Conservation, USDA-Natural Resources Conservation Service, and University of Missouri Extension. If you would like to be removed from this mailing list or have suggestions for future articles please contact [jeff.powelson@mdc.mo.gov](mailto:jeff.powelson@mdc.mo.gov) or 816-232-6555 x5772 or write to the address shown.



The name of this newsletter is taken from an old concept....that a quail covey operates from a headquarters (shrubby cover). If the rest of the covey's habitat needs are nearby, a covey should be present. We are encouraging landowners to manage their quail habitat according to this concept. Use **shrubs** as the cornerstone for your quail management efforts. Manage for a **diverse grass, broadleaf weed and legume mixture and provide bare ground** with row crops, food plots or light disking **right next to** the shrubby area.

## Buy native trees and shrubs from MDC State Forest Nursery

Need trees and shrubs for your landscape? Go native with the Missouri Department of Conservation (MDC). Native trees and shrubs can help improve wildlife habitat and soil and water conservation while also improving the appearance and value of private property.

MDC's George O. White State Forest Nursery offers a variety of low-cost native tree and shrub seedlings for reforestation, windbreaks, erosion control, wildlife food and cover, and other purposes.

**MDC's 2018-2019 Seedling Order Form provides images and information on available items, along with ordering information. Find it in the September issue of the Missouri Conservationist, at MDC regional offices and nature centers, online at [mdc.mo.gov/seedlings](http://mdc.mo.gov/seedlings), or by contacting the State Forest Nursery at 573-674-3229 or [StateForestNursery@mdc.mo.gov](mailto:StateForestNursery@mdc.mo.gov).**

**Place orders from Sept. 1 through April 15, 2019. Supplies are limited so order early. Orders will be shipped or can be picked up at the nursery near Licking from February through May.**

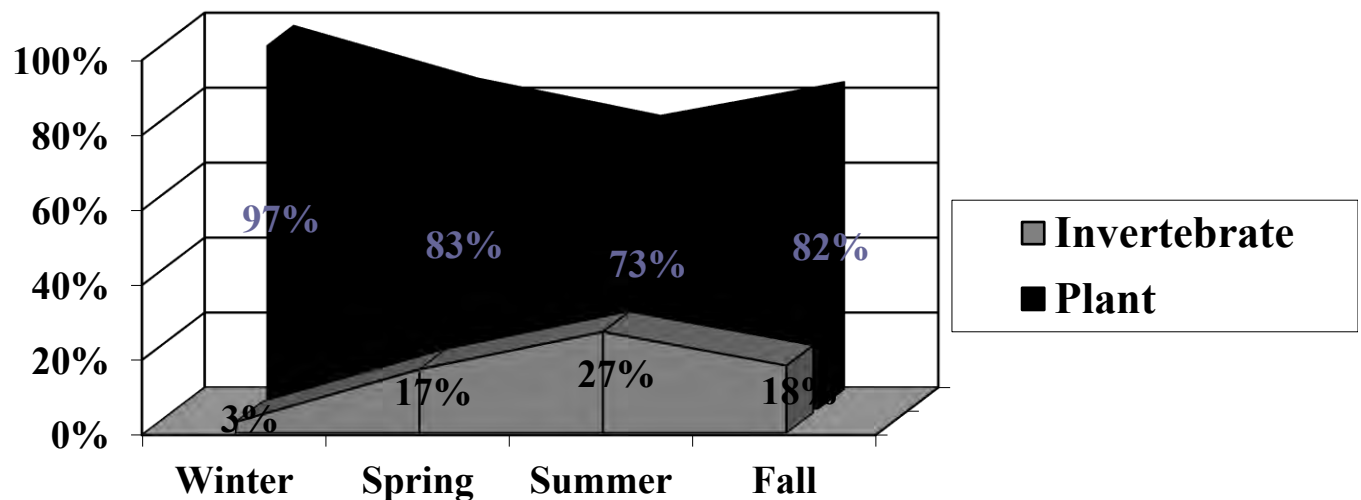
The nursery provides mainly one-year-old, bare-root seedlings with sizes varying by species. Seedlings varieties include: pine, bald cypress, cottonwood, black walnut, hickory, oak, pecan, persimmon, birch, maple, willow, sycamore, blackberry, beautyberry, buttonbush, holly, dogwood, hazelnut, redbud, ninebark, pawpaw, spicebush, elderberry, serviceberry, sumac, wild plum, witch hazel, and others.

Seedlings are available in bundles of 10 or increments of 25 per species. Prices range from 22 – 90 cents per seedling. Sales tax of 6.1 percent will be added to orders unless tax exempt. There is an \$8 handling charge for each order. Receive a 15-percent discount up to \$20 off seedling orders with a Heritage Card, Permit Card, or Conservation ID Number.

Native trees and shrubs can help improve wildlife habitat and soil and water conservation while also improving the appearance and value of private property. The Missouri Department of Conservation's

## Quail Food By Season

The graph below is a general representation of how quail diet changes through the season. Notice the heavy insect requirements in the summer. Quail chick diet requires 80-95% insects during their first few weeks of life. Commonly eaten insects include beetles, leafhoppers, spiders, grasshoppers, ants, crickets, stinkbugs, flies, and snails.



## Why have turkeys seemingly replaced quail in many areas?

Among the changes that have hurt quail, one that relates to turkeys is the increase in wooded land. Missouri has gained nearly 2.5 million acres of wooded land since the early 1970's. These new wooded lands are generally not large stands of healthy, mixed forest that provide valuable wood products or homes to forest interior songbirds. Much of this increase is comprised of small stands of less desirable trees such as cedar, Siberian elm or locusts that have encroached into once-open areas. Along with this expansion of wooded cover, turkeys have colonized parts of the state that were formerly bobwhite strongholds, particularly in the traditional prairie landscapes of western and northern Missouri.

Turkeys and quail share some habitat needs, such as grass for nesting, weedy areas for feeding and row crops and acorns for winter food. However, the trees that turkeys require for roosting can spell trouble for quail. Quail need low-growing tangles of brush and briars for protection from predators and the elements. Tall trees shade out this beneficial woody cover over time and provide strike points for predatory hawks and owls.

## Sign up for an e-copy of The Covey Headquarter Newsletter

Stay in touch with MDC news and events online. Go to the following website - [http://mdc.mo.gov/user\\_mailman\\_register](http://mdc.mo.gov/user_mailman_register) to subscribe to the Covey Headquarters Newsletter via e-mail. The e-mail version will come to you about 4-5 weeks earlier than the printed version. There are several news releases, newsletters and periodicals listed on this website. Enter your email address, then click the quail box under the hunting and fishing tab to start receiving your issue by e-mail. If you would like to be taken off the print version, please send an e-mail to the address listed at the top of this newsletter.

## Did You Know???

Recreational mowing is a sure way to destroy good quail habitat. There are better and more effective ways to manage habitat. Try prescribed fire, light disking, managed grazing and even herbicide applications.

Sometimes mowing is necessary. Make sure you consult a biologist before starting. Some reasons to mow include preparing a field for an herbicide application, controlling invasive plants, preparing a firebreak or to keep weeds under control in a new warm-season grass planting. Mowing should never be considered a long-term management practice.

## Conservation Reserve Program Mid-Contract Management Calendar

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Burn cool-season grasses													3/15 – 4/30
Burn warm-season grasses													7/16 – 3/15
Disk													7/16 – 12/31
Spray cool-season grasses													3/15 – 4/30 or 10/1 – 12/1
Spray warm-season grasses													7/16 – 9/15
Interseed Legumes and Wildflowers	IN CONJUNCTION WITH THE ABOVE MID-CONTRACT MANAGEMENT OPTIONS <b><u>DO NOT</u> INTERSEED BIRDSFOOT TREFOIL, SERECIA LESPEDEZA, SWEET CLOVER, OR CROWN VETCH</b>												

## Fall Covey Headquarter Calendar

### September

Mow firebreaks to prepare for late summer and fall burns  
 Spray sericea lespedeza now through the end of the month  
 Conduct a prescribed burn to reduce warm-season grass dominance  
 Order tree and shrub seedlings from the MDC nursery – [www.mdc.mo.gov](http://www.mdc.mo.gov)

### October

Conduct quail covey call census  
 Spray native grass plantings for invading fescue and brome after a killing frost  
 Most USDA Conservation Programs will announce new signups after Oct. 1  
 Eliminate fescue and brome from shrub thickets, woody draws, and fencelines after leaf drop  
 Two-day youth quail and pheasant season Oct. 27-28

## **November**

Quail and pheasant season begins

Start your edge feathering operations – make new homes for quail and rabbits

Prepare ground for spring shrub plantings

Basal spray undesirable trees according to herbicide label now through March

## **Provide these five so quail will thrive**

### **1. Brooding Cover**

Simply put, good brood habitat is weedy. This cover type consists of annual plants such as ragweed, pigweed, annual lespedeza and foxtail with little litter on the soil surface. Good brood rearing cover has plenty of open spaces at ground level with an overhead canopy of grasses and forbs. An abundance of forbs and legumes also attracts a variety of insects, which chicks need for rapid development and hens need for nesting.



Recently disturbed areas typically provide good brooding cover for one to three years. At least 40 percent of a covey's home range should be in brooding cover. In addition to attracting insects for summer food, the annual plants common in brood habitat also produce an abundance of seeds eaten by quail throughout the fall and winter. Most farms in Missouri lack this type of weedy cover – and therefore healthy quail populations.

### **2. Nesting Cover**

Quail place their nests at the base of a grass clump at least 8 inches tall. During the early portion of the nesting season, they use leaves and stems from the previous year for nest building and concealment. By mid-summer, they may build nests from the current year's growth.

Clumpy grasses such as native warm-season grasses, orchard grass or timothy are preferred. Quail nest research in Missouri has shown that quail prefer to nest within 50 feet of an edge. Similar research in Iowa showed a preference for nesting within 80 feet of an edge. Edge is generally considered the boundary between habitat types, such as a crop field, covey headquarters, pasture, woodland, etc.





Nesting cover should make up at least 30 percent of a covey's home range. Dense patches of grass are not necessary for nesting, and in fact may be detrimental to bobwhites. Ideally, nesting habitat will be embedded within patches of brood habitat. The more edge created within nesting cover, the more opportunities there will be for quail nesting and brood rearing. Strip disking, light grazing, prescribed burning, food plots or covey headquarter establishment are some ways to create edge within nesting cover.

### 3. Roosting Cover

This cover type includes herbaceous vegetation such as ragweed, food plots and recently disturbed grasses at least 12 to 36 inches tall with at least 25 percent bare ground for easy movement. Quail usually do not roost in shrubby cover or woody draws except during periods of ice or snowy weather. During winter in rolling terrain, quail may select roost sites with a southerly aspect to take advantage of the warming effects of solar radiation.



### 4. Escape Cover

Used daily throughout much of the year and after snow or ice flatten the grasses and forbs, this cover type includes brushy fence rows, plum and dogwood thickets, edge feathering, downed tree structures (loose brush piles), forage sorghum and broom-corn food plots. Five to twenty percent of the home range should be made up of shrubby cover. Shrub thickets, edge feathering and downed tree structures should be scattered throughout and along the edges of grass fields. As a rule of thumb, try to situate escape cover patches no more than 100 yards apart throughout the field to ensure that quail can readily dive into cover if needed.



Low-growing woody or shrubby cover is often a limiting factor on many farms in Missouri.

## 5. Food

Throughout much of the year, quail eat an array of annual seeds, including pigweed, ragweed, foxtail, and lamb's-quarters. During the summer, quail depend on insects, seed, and soft fruits for food. In the winter, quail make use of acorns, weed seeds and grains, especially during heavy snow or ice storms. Food plots of milo, forage sorghum, soybeans, millet, corn and sunflowers are good sources of winter food, but they should be adjacent to good cover to minimize exposure to predators and weather. Regular management practices such as burning, spraying, and disking will promote annual food growth.



Visit the following websites to learn more about quail foods - <https://extension2.missouri.edu/mp903> and <https://www.youtube.com/watch?v=ZDMwWt61pCw>

## Missouri Outdoor Recreational Access Program (MRAP) Update

In less than 3 years, the Missouri Outdoor Recreational Access Program (MRAP) has exceeded its original goal of enrolling 10,000 acres across the state. To date, nearly 15,000 acres and 60 properties have been opened to the public for outdoor recreation. Whether you are looking for new lands to hunt quail and rabbits or if you are looking for a peaceful place to enjoy some bird watching, there is an available MRAP property that aims to provide that opportunity. In fact, the first Youth Hunting and Fishing properties were enrolled this year helping to achieve the goal of encouraging youth hunter recruitment.

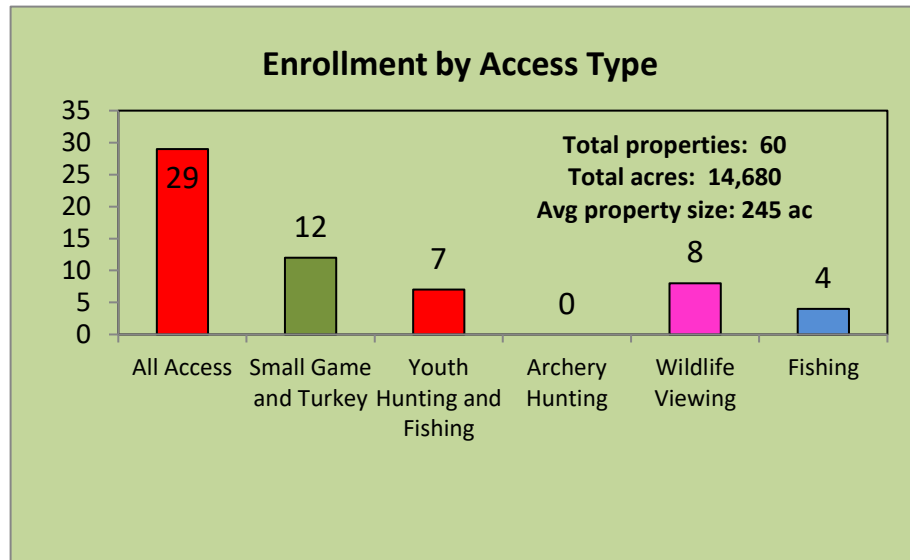
Although new to Missouri, walk-in hunting programs like MRAP are not new to the Midwest. MRAP and other walk-in hunting programs provide incentive payments to private landowners who voluntarily open their properties to the public for walk-in hunting, fishing, or wildlife viewing. Through the federal Voluntary Public Access and Habitat Incentives Program, MDC received more than \$1 million to help initiate this new program. These funds, along with other partner contributions and support, were essential to jump-starting this new outdoor recreation program in Missouri.



One primary component of MRAP that distinguishes it from other states' recreational access programs is our requirement for enrolled properties to meet a minimum threshold for quality wildlife habitat. Although the minimum quality habitat requirement for MRAP properties is 20 percent, each of our enrolled MRAP properties are averaging over 50 percent quality habitat! Survey cards submitted by public users support



this as 80 percent of visitors rated the habitat as 'Good' or 'Excellent'. MRAP visitors are likely to observe a number of management and habitat restoration practices during their visit to a property.



To date, we have received over 150 offers from interested landowners across the state. Over 2,100 public user survey cards have been collected from MRAP properties and indicate a positive response to the program. Survey data revealed that 59 percent of MRAP users who submitted a card reported a 'Satisfied' experience, 34 percent 'Neutral' and only 7 percent indicated they were 'Dissatisfied' with their

experience. Monitoring through both public user and landowner surveys is a primary component of MRAP as these surveys allow us to evaluate the program and make changes to improve the program. This fall, we will again enlist the help of mail surveys from our participating MRAP landowners to gain additional feedback on the program.

To learn more, visit the MDC-MRAP webpage at [mdc.mo.gov/mrap](http://mdc.mo.gov/mrap). There you can find maps of enrolled properties, public access options, rules and procedures, and enrollment information for landowners. We hope to continue enrollment momentum for many years to come and continue to provide high quality areas for hunting, fishing and nature enthusiasts to connect with the outdoors.

*This material is based upon work supported by the Natural Resources Conservation Service, U.S. Department of Agriculture, under grant number 69-3A75-16-510. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture.*

## Youth-Only Quail and Pheasant Season

To provide more opportunities for hunters ages 6 through 15, the Conservation Commission has established youth-only quail and pheasant seasons. Both seasons take place October 27-28, 2018. Youths who are not hunter education certified must hunt in the immediate presence of a properly licensed and hunter-ed certified adult. Adults may assist youths, but the adult may not hunt quail or pheasant.

## Mark Your Calendar

### **Prescribed Burn Workshop -**

**Date:** Saturday January 5, 2019

**Time:** 9:00 AM to Noon

**Location:** MU Forage Systems Research Center, Linneus, MO

Lunch is included. Please RSVP by January 2<sup>nd</sup> by calling the MU Extension office at 660-895-5123.

## Census the Quail on your Property this fall

Fall quail whistling counts should be conducted in October. The maximum distance a quail whistle can be heard is 800 yards, but on average, 547 yards is the limit, so space listening points 1,000 yards apart. With a 547-yard listening radius, you are theoretically hearing quail in a 194-acre circle around you. If trees or topography limit your ability to hear quail whistling 547 yards away, listening stations can be closer together. Put listening stations on ridgetops to maximize the area you survey each morning. Permanently mark each listening station so they can be used every year.



Listen only on calm and clear mornings starting 45 minutes before sunrise during the last 3 weeks of October. Listen until about 10 minutes before sunrise. Generally, you will not hear the familiar "bobwhite" during the fall calling period. The covey call is a clear loud whistle vocalized as "koi-lee." Listen carefully because the call typically lasts only 30 seconds. For best results, be consistent in the way you collect the data. Keep track of all data and keep it on file for year-to-year comparison. To learn more about fall whistle counts visit <https://mdc.mo.gov/resource/covey-count-data-sheet> This site also contains a form to record and keep track of what you hear.

UNIVERSITY OF MISSOURI  
 Extension



United States Department of Agriculture  
Natural Resources Conservation Service



*Serving nature and you<sup>®</sup>*

This institution is an equal opportunity provider.

Equal Opportunity Provider and Employer

The Covey Headquarters Newsletter  
3915 Oakland Ave  
St. Joseph, MO 64506

RETURN SERVICE REQUESTED